

# 6CA5

## Beam Power Tube

### 7-PIN MINIATURE TYPE

#### GENERAL DATA

##### Electrical:

Heater, for Unipotential Cathode:

Voltage (AC or DC) . . . . .	6.3	volts
Current . . . . .	1.2	amp

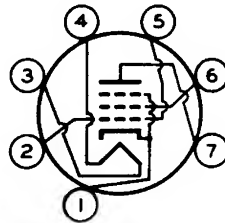
Direct Interelectrode Capacitances (Approx.):<sup>a</sup>

Grid No.1 to plate. . . . .	0.5	$\mu$ f
Grid No.1 to cathode & grid No.3, grid No.2, and heater . . . . .	15	$\mu$ f
Plate to cathode & grid No.3, grid No.2, and heater . . . . .	9	$\mu$ f

##### Mechanical:

Operating Position. . . . .	Any
Maximum Overall Length. . . . .	2-5/8"
Maximum Seated Length. . . . .	2-3/8"
Length, Base Seat to Bulb Top (Excluding tip). . . . .	2" $\pm$ 3/32"
Diameter. . . . .	0.650" to 0.750"
Dimensional Outline . . . . .	See <i>General Section</i>
Bulb. . . . .	T5-1/2
Base. . . . .	Small-Button Miniature 7-Pin (JEDEC No.E7-1)
Basing Designation for BOTTOM VIEW. . . . .	7CV

Pin 1 - Cathode,  
Grid No.3  
Pin 2 - Grid No.1  
Pin 3 - Heater



Pin 4 - Heater  
Pin 5 - Grid No.1  
Pin 6 - Grid No.2  
Pin 7 - Plate

#### AMPLIFIER — Class A<sub>1</sub>

Maximum Ratings, Design-Center Values:

PLATE VOLTAGE . . . . .	130	max.	volts
GRID-No.2 (SCREEN-GRID) VOLTAGE . . . . .	130	max.	volts
GRID-No.1 (CONTROL-GRID) VOLTAGE:			
Positive-bias value . . . . .	0	max.	volts
GRID-No.2 INPUT . . . . .	1.4	max.	watts
PLATE DISSIPATION . . . . .	5	max.	watts
PEAK HEATER-CATHODE VOLTAGE:			
Heater negative with respect to cathode . . . . .	200	max.	volts
Heater positive with respect to cathode . . . . .	200 <sup>b</sup>	max.	volts
BULB TEMPERATURE (At hottest point on bulb surface). . . . .	180	max.	°C

##### Typical Operation and Characteristics:

Plate Voltage . . . . .	110	125	volts
Grid-No.2 Voltage . . . . .	110	125	volts



RADIO CORPORATION OF AMERICA  
Electron Tube Division  
Harrison, N. J.

DATA  
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Grid-No.1 Voltage . . . . .	-4	-4.5	volts
Peak AF Grid-No.1 Voltage . . . . .	4	4.5	volts
Zero-Signal Plate Current . . . . .	32	37	ma
Max.-Signal Plate Current . . . . .	31	36	ma
Zero-Signal Grid-No.2 Current . . . . .	3.5	4	ma
Max.-Signal Grid-No.2 Current . . . . .	7.5	11	ma
Plate Resistance (Approx.) . . . . .	16000	15000	ohms
Transconductance . . . . .	8100	9200	$\mu$ mhos
Load Resistance . . . . .	3500	4500	ohms
Total Harmonic Distortion . . . . .	5	6	%
Max.-Signal Power Output . . . . .	1.1	1.5	watts

## Maximum Circuit Values:

Grid-No.1-Circuit Resistance:

For fixed-bias operation . . . . .	0.1 max.	megohm
For cathode-bias operation . . . . .	0.5 max.	megohm

<sup>a</sup> Without external shield.

<sup>b</sup> The dc component must not exceed 100 volts.

